



Revegetating cleared land



"...it is possible to protect both waterways and the environment and still operate a profitable sustainable dairy business."

Native plants are blooming again on a once-windswept dairy farm in South Gippsland.

More than 30 years ago Rae and Bruce Knee bought a 277 hectare dairy, 'Kewita', on cleared land near Toora, on the southern slopes of the Strzelecki Ranges, with a five kilometre frontage to the Franklin River.

Today, they and their son, Daniel, are well-known in the district for putting native vegetation back along streams once infested with willow and for incorporating vegetation corridors into their paddock design.

First steps ...and some mistakes

The first big step in revegetating such an exposed landscape was to establish a windbreak around the house. Rae recalls how, "The wind would just come roaring across the valley and lift the lino as it came through the floorboards."

With windbreaks around the house underway, they looked at how to protect stock from the wind.

A start was made in planting Cypress Pine and Pinus Radiata. But this proved a mistake. Plantings failed and rabbits were a problem. The Cypress Pines soon outgrew the fences and





damaged them, constantly shorting the electric fencing. It was not long before Rae and Bruce began the hard work of removing the pine trees and replacing them with native species.

The Knee's move to revegetate the banks of the Franklin River was catalysed by problems controlling stock. They were hard to get out of the river, with the steep banks proving dangerous for the two and four wheel bikes used to bring the cows in for milking. And on top of this, even small floods and rises in the river would take out dividing fences, so that stock would get into the neighbour's property.

Early revegetation along the Franklin River on 'Kewita' began in 1987 and included fencing off areas prone to degradation, such as river banks, and incorporating windbreaks and other tree planting into a paddock subdivision to help control stock better.

These initiatives helped improve water quality and provided habitat for native species, thus encouraging biodiversity protection. The family hopes that a increase in biodiversity will be a major environmental benefit of revegetation on 'Kewita'.

Community involvement

As well as working on 'Kewita', the Knee family has been involved in conservation work in the wider community, with Rae Knee being secretary of the Franklin River Landcare Group for seven years. Involvement in community groups like this increased the family's awareness of environmental issues and has been mirrored in the work they have undertaken on 'Kewita'.

The Knee's project builds on previous community work in the region. It links with a much larger project that included the middle and lower reaches of the Franklin River and which received \$1.2 million funding under the Australian Government's Natural Heritage Trust for two years from 2004. Assistance for this project also came through the One Billion Trees Program, Kodak, South Gippsland Shire Council and community partnerships. The initiative involved volunteers and local community groups fencing and revegetating 25 kilometres of the Franklin River and planting 35,000 native plants. In turn, it developed links with an earlier program initiated by the South Gippsland Farm Trees Group which established wildlife corridors to help conserve the local koala population.

Biodiversity conservation and revegetation work has been continuing on 'Kewita', as well as throughout the Franklin River Catchment as a whole. In recognition of their efforts, the Knee's property was selected in 2002 as a focus property under the federally funded Gipps Dairy Riparian Project, which aims to present best practice riverbank vegetation techniques to the farming community.



Costs and benefits

'Kewita' now carries some 255 milking cows and 800 first cross ewes for prime lamb production.

In 2004 a farm management consultant included the Knee family in a study on the costs and benefits of environmental conservation work on a number of properties in the South Gippsland region.

According to the study, "The Knee dairy business presents a balanced approach to dairy farming. Physical and financial performances are both well above average and personal objectives are being achieved. This has been done with a reduced grazing area of 27.9 hectares and a capital cost to the business of \$35,625 since 1990. Consequently, it would appear that it is possible to protect both waterways and the environment and still operate a profitable sustainable dairy business."

Rae and Bruce Knee have made a breakthrough in revegetating a farm in a high rainfall and intensively used landscape. They aim to keep up the momentum and build on their experience. The plan is to continue to remove willows and to improve the native vegetation along the river, as well as revegetate all the wet gullies on the property and any areas that show signs of degradation, as the farm increases in productivity.

They have a profitable business and a rewarding lifestyle. Their revegetation work, which connects them with other community efforts, has proved a central part of their success.

Lessons learnt

- A denuded rural landscape can be brought back to life and increased biodiversity encouraged.
- Rae and Bruce Knee have gained knowledge about environmental management on their property over a considerable period of time. Sharing this knowledge through community interactions can help others avoid mistakes and benefit from the Knee's years of experience.
- The property meets both personal and social goals and connects the family to the wider community through a variety of environmental and sustainability activities.



Biodiversity encompasses the variety of all living things. Conserving biological diversity gives us the best chance of adapting to our rapidly changing world.

This leaflet is one of a series showing how farmers, Indigenous communities, local government and community groups have either initiated special biodiversity projects, or have successfully incorporated biodiversity protection into their work and daily lives.

We hope these success stories provide useful information and inspiration to others in similar situations.

For more information: www.nrm.gov.au; or freecall 1800 552 008

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P2: Extensive revegetation along the Franklin River; Roland Breckwoldt.
Platypus; Andrew Tatnell.

P3: Rae, Bruce & Daniel Knee;
Revegetation;

Back: Rae Knee. Photos, Roland Breckwoldt

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